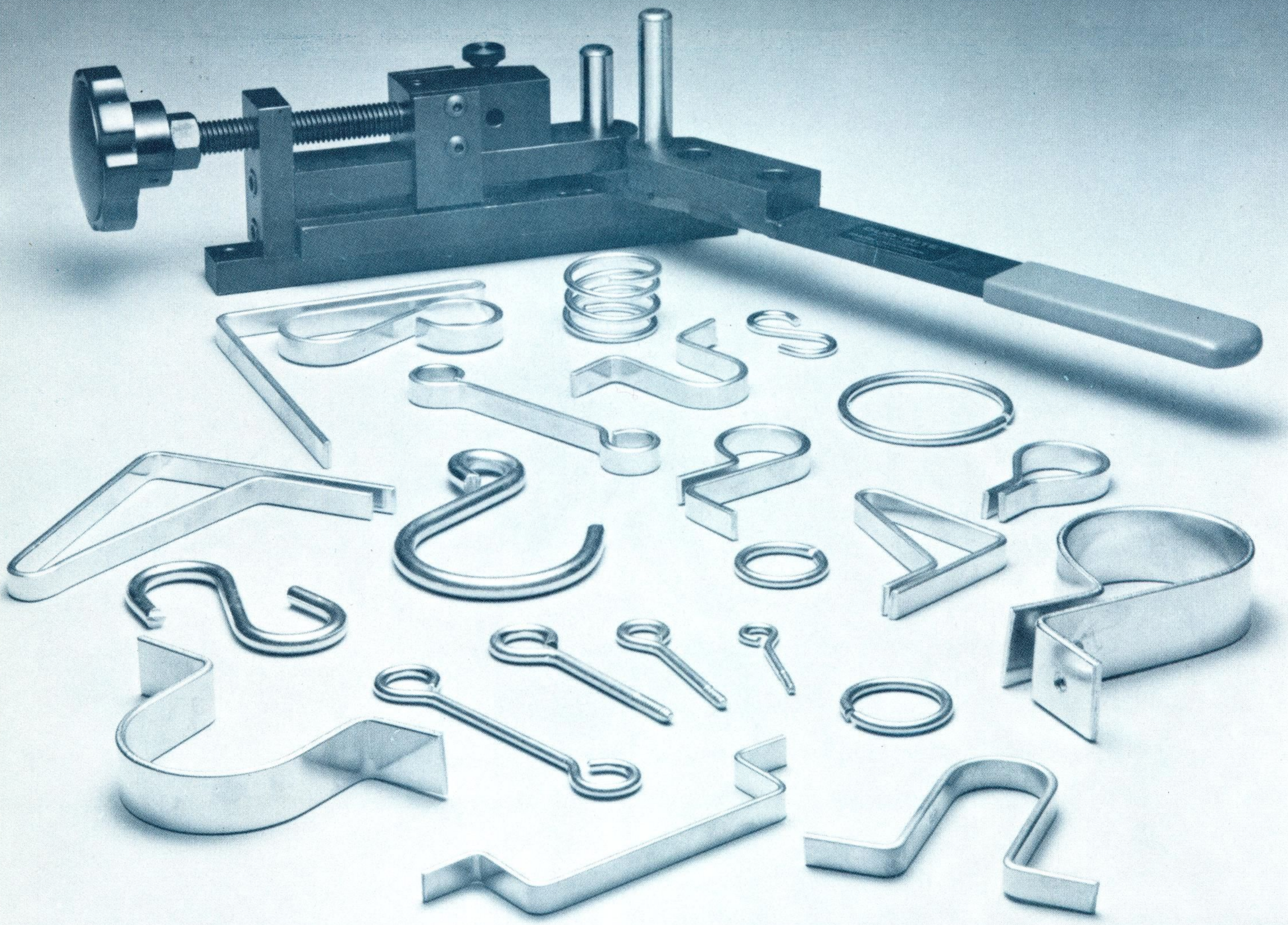
INTRICATE METAL BENDING MADE EASY ...AND ECONOMICAL!



NEISE MODERNTOOLS

KARL A. NEISE. INC.

56-02 ROOSEVELT AVE.
PHONE: 212–446-7799

WOODSIDE, NEW YORK 11377
CABLE ADDRESS: KARLNEISE

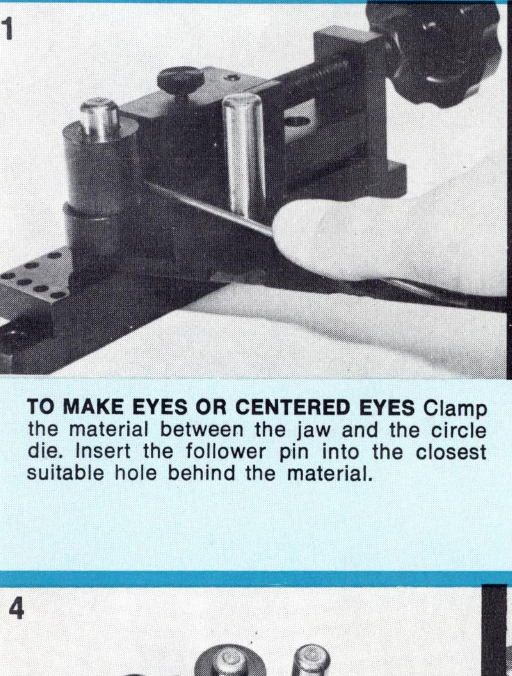
NEW! KAN BEND HAND BENDER

YOUR BEST VALUE IN PRECISE METAL BENDING!

Durable enough to multibend 5/16″ diameter wire and 1″ x 1/8″ flat metal, this compact six pound unit is still portable enough to fit most tool kits. Originally designed as a vise or bench mounted tool for industrial model makers and maintenance departments, the **KAN BEND** hand bender is now used extensively by laboratory, production, and service personnel. It takes only seconds to change operations, make precise sharp angle bends and produce blue print or prototype parts from most metals including tubing. Production at a rate in excess of 400 bends per hour has been reported. The machine's special capacity of forming closely adjacent bends in several planes makes it an ideal tool for the hobbiest or handyman. Whatever your needs . . . clamps, handles, brackets, hooks, coils or other complex shapes . . .

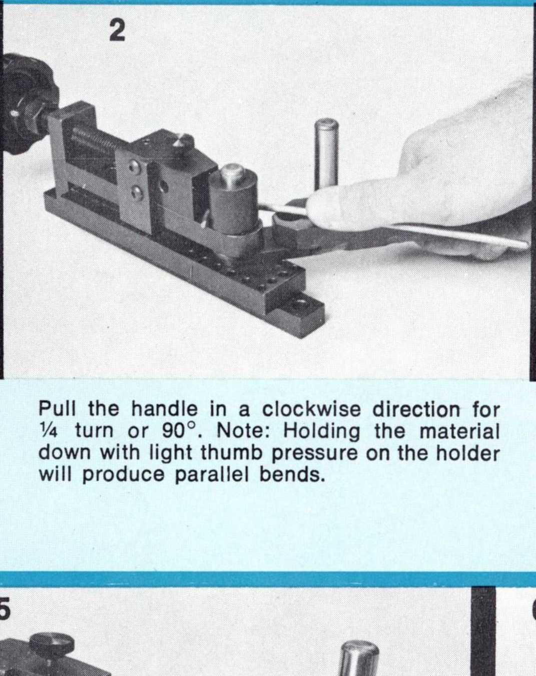
DIRECTIONS

1



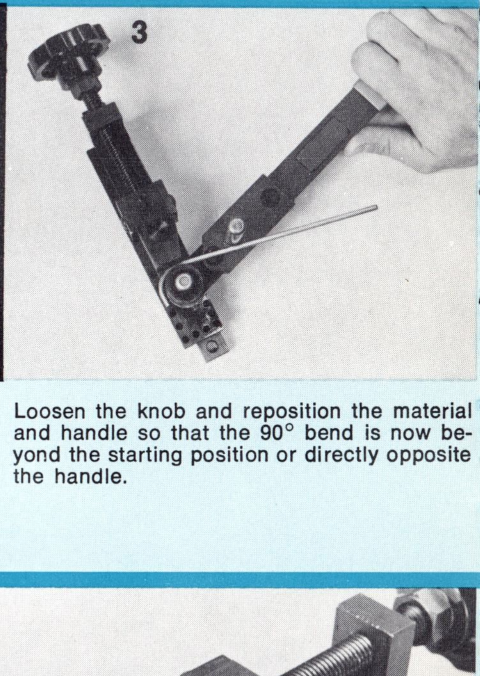
TO MAKE EYES OR CENTERED EYES Clamp the material between the jaw and the circle die. Insert the follower pin into the closest suitable hole behind the material.

2



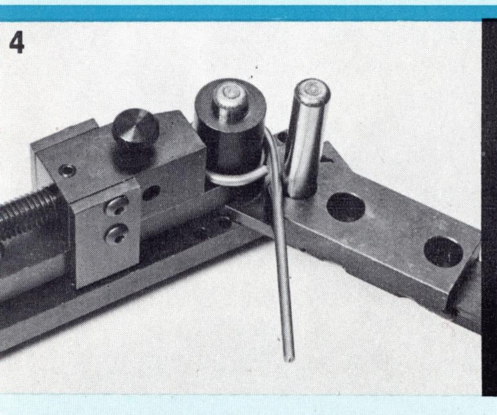
Pull the handle in a clockwise direction for ¼ turn or 90°. Note: Holding the material down with light thumb pressure on the holder will produce parallel bends.

3



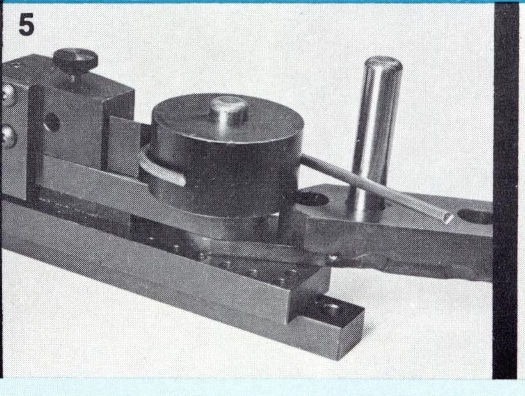
Loosen the knob and reposition the material and handle so that the 90° bend is now beyond the starting position or directly opposite the handle.

4



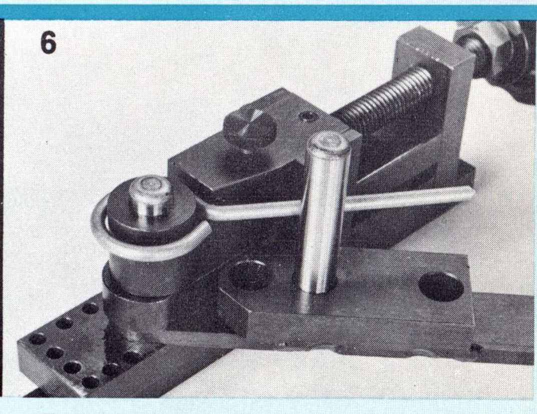
Reclamp the metal securely and continue to bend one full revolution or until the material meets itself. In the making of a circle it is necessary to slightly overlap the turn to compensate for the metal springback.

5



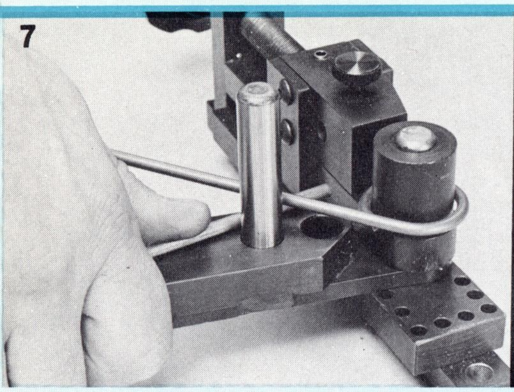
When working with heavy wire gauges, it is recommended that because of slippage, the sharp angle die be used to hold the metal. Place the sharp angle die on edge in front of the jaw and center the wire across its hole. Clamp the wire between the sharp angle die and tighten firmly. Bend as required.

6



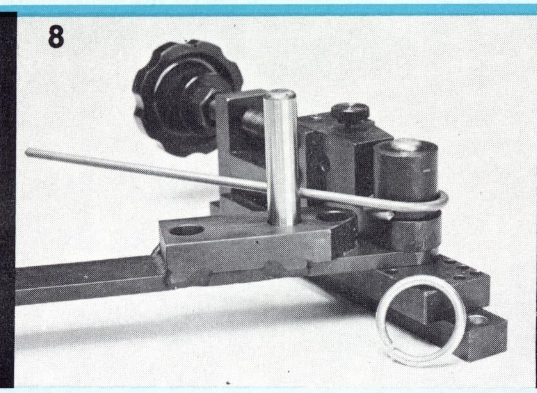
To center the eye, loosen the knob and rotate the material and the handle to the starting position. Move the follower pin to the opposite side of the material. Reclamp the metal. Move the handle in a counter clockwise direction until it stops against the bender.

7



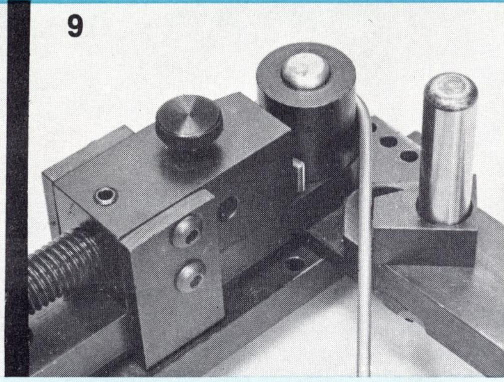
BENDING CIRCLES, COILS OR LOOPS Repeat Steps 1, 2 and 3 except that in starting the third bend, lift the material slightly with your fingers or insert a slightly thicker piece of metal under the material and bend in a clockwise direction.

8



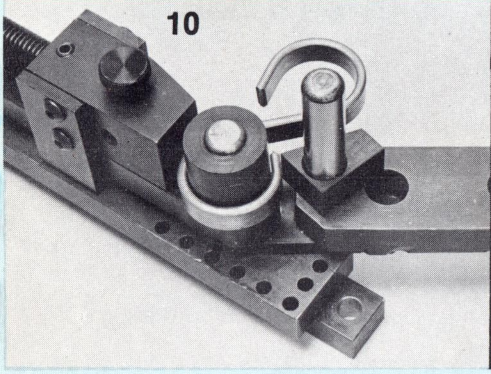
Remove the material if only one circle or ring is desired and cut off excess. However, if a coil or more rings are needed, reclamp the metal and continue as necessary. Spaced coils can be made by slipping spacers of a thickness equal to the spacing required between the loops as they are bent.

9



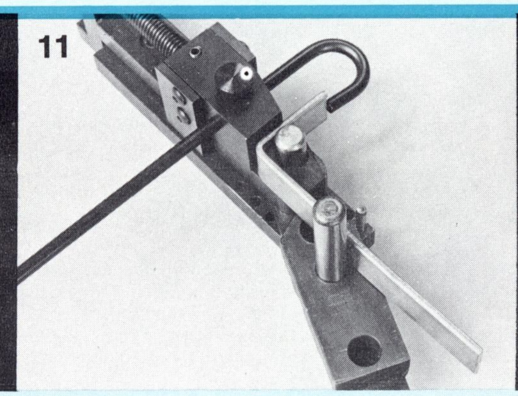
Making an "S" with close adjacent bends is achieved with the square angle die from predetermined lengths of metal. Align the edge of the material with the center of the circle die. Clamp the metal and make one complete turn of the handle.

10



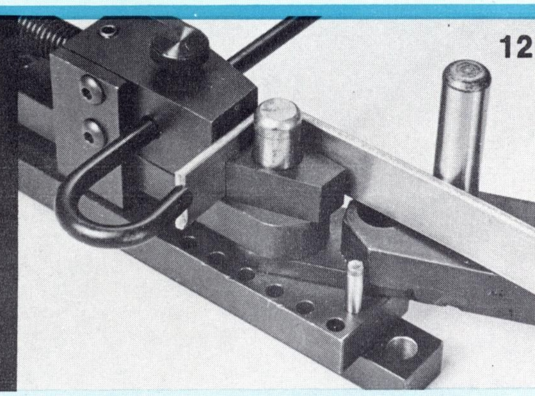
Unclamp the metal and position the first loop on the angle side of the jaw. Place the sharp angle die over the follower pin and bend in a counter clockwise direction.

11



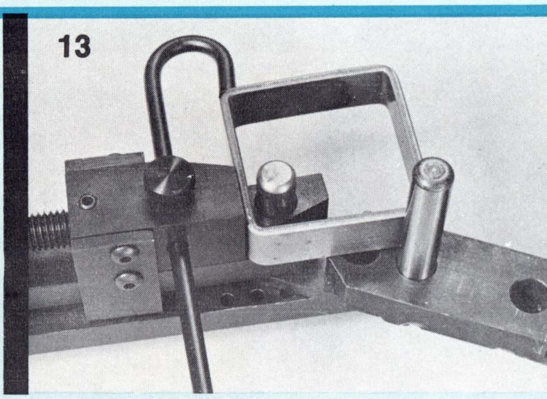
USING THE GAUGE The gauge can be used on either side of the bender. Just slip the gauge through the hole provided in the jaw. Measure the distance required from the center of the bender to the edge of the gauge and tighten the gauge locking screw.

12



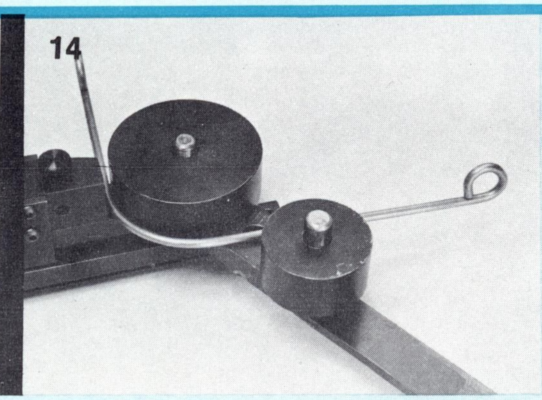
The bend stop pin may be used for repeated bends. Make a 90° bend or any desired angle and insert the bend stop pin in front of the handle. Loosen the knob and remove the material. Repeat as required.

13



To make a square with sharp angle bends, use the gauge and the bend stop pin. Position metal against the gauge as shown in Fig. 11 making one 90° bend. Turn the metal 90° locating it against the gauge. Tighten firmly and move the handle to stop pin in a counter clockwise direction. Reposition material making final bend.

14



MULTIPLE PLANE BENDS Proper planning of bends within size limitations of the bender is required. The replacement wire handle shown above was first bent forming the 2 eyes with standard ½″ dia. circle pin. The final bends, using a 3″ and a 2″ circle die (accessory tooling), were first centered on the 3″ circle die, then using the 2″ circle die as a close follower, two 90° bends were made.

KARL A. NEISE. INC.

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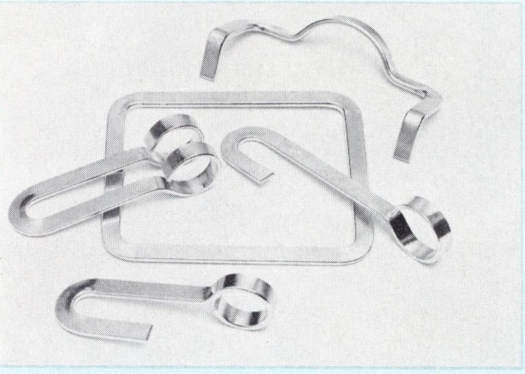
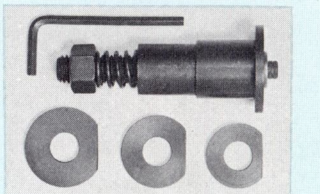
EDGEBENDING



The multitude of shapes and forms possible from the basic tooling is greatly expanded through the addition of the EDGEBENDING KIT. This unique, patented, level plane metal retainer, exerts compression during edgewise bending and controls deformation to a minimum. Installed in minutes, it offers a new horizon of metal forming previously found only in high priced equipment. While metal for edgewise bending must be sufficiently ductile—high strength products results. Capacity is .120 inch in thickness to ¾″ width.



DIRECTIONS

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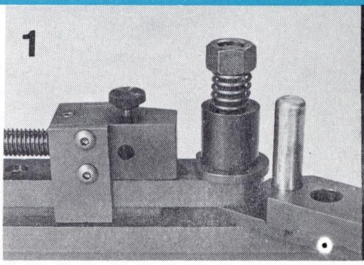

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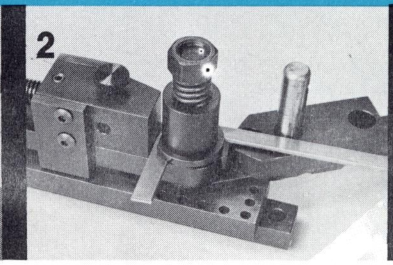

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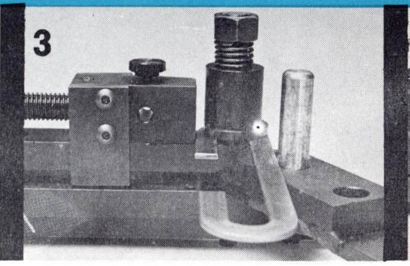

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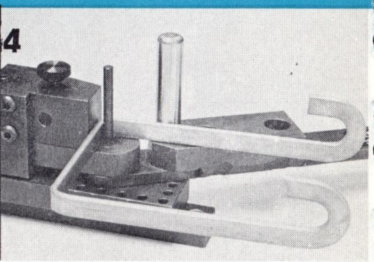


1 Insert the forming post into the bender with the threaded part of the post up. Turn the bender on its side and place the small washer over the 10-32 x 750 lg. cap screw. Insert the screw and washer into the bottom of the forming post and tighten with Allen wrench. Turn the bender over and mount in a vise or to a bench. Select one disc of the proper size for the material and place it over the forming post. Put on either the ⅞″ or 1″ dia. compression sleeve—(⅞″ for use with 2 smaller discs). Put on the spring and nut.

2 Insert the metal under the disc and lock the jaw against the material. Tighten the nut against the spring applying pressure to the metal (over tightening will not allow the metal to pass under the disc and insufficient pressure will allow the metal to deform). Holding the metal flat during bending, make short movements of the handle with the follower pin close to the metal.

3 Bends under 180° can readily be slipped out from under the disc by loosening the nut slightly; but for bends over 180° the nut, spring, collar and disc must be removed.

4 Combined bending of normal bends and edgebending greatly expands the usage of the bender. A properly planned piece of this type was made in 4 bends. First the two edgebends were made followed by standing the metal on edge and using the ¼″ circle pin to complete the two 90° bends.

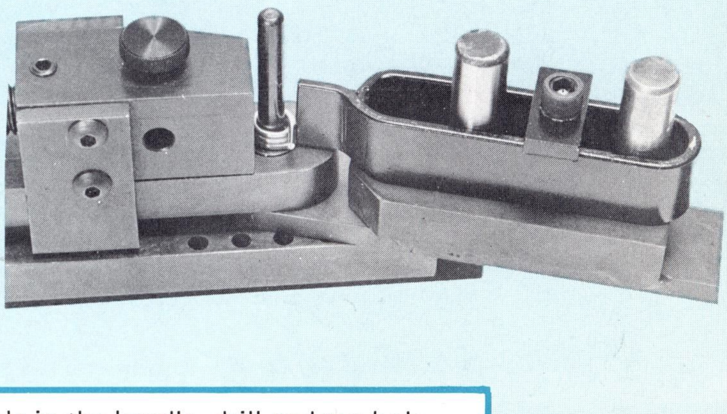
NEW!

CLOSE FOLLOWER

ATTACHMENT NO. 51200

DIRECTIONS

Place (2) ½ inch diameter pins into the last two holes in the handle and drop the CLOSE FOLLOWER ATTACHMENT over the pins as illustrated. Adjust to wire size and secure ¼″ x 20 clamping screw to form smaller diameters.

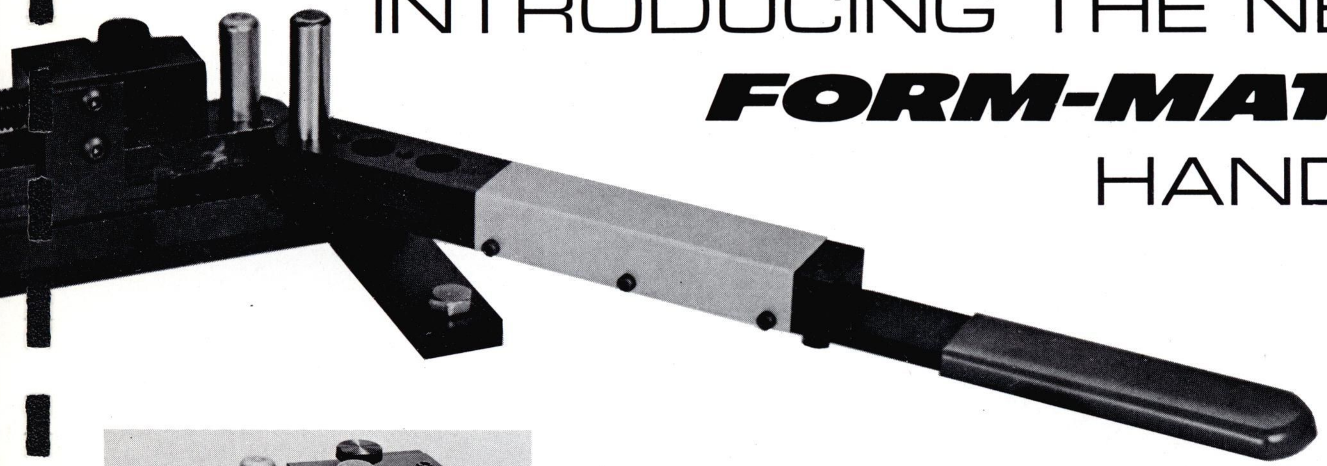


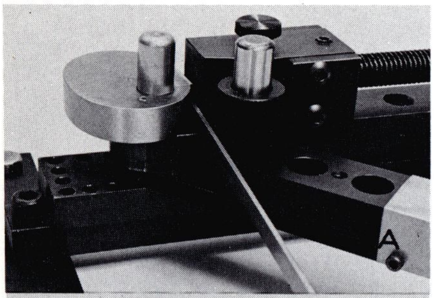
If your KAN BEND has no ¼″ - 20 hole in the handle, drill and tap hole or order: CLOSE FOLLOWER ATTACHMENT NO. 51204.

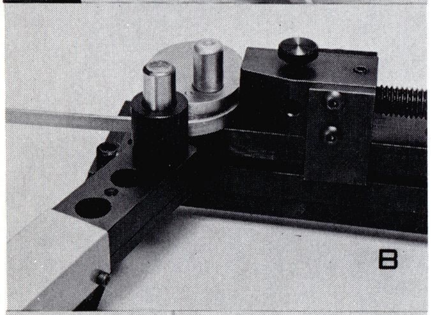
APRIL 1977

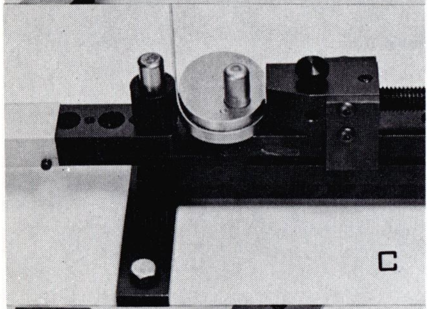
KAN BEND HAND BENDER

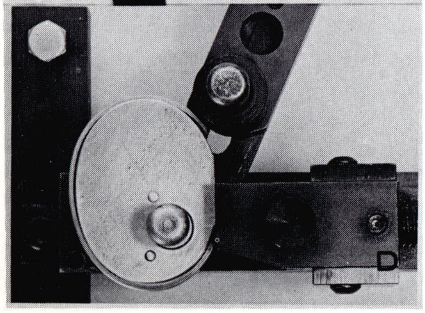
INTRODUCING THE NEW *FORM-MATIC* HANDLE





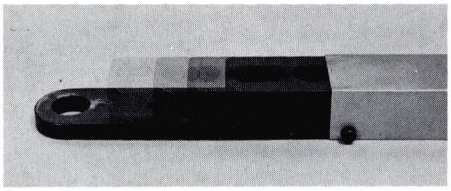






Now you can add new dimensions to the versatility of your **KAN BEND multi forming hand bender !**

The all-new ***FORM-MATIC*** *handle, with its' exclusive spring-loaded follower, will gently glide around the contour of your die giving you accurate and consistant duplication. The photos shown demonstrate the handle following an elliptical die in one smooth movement* . . . no need for multiple set-ups.



$29.00

Ordered as a single item add
$1.50 packing & U.P.S. charges.

Instructions

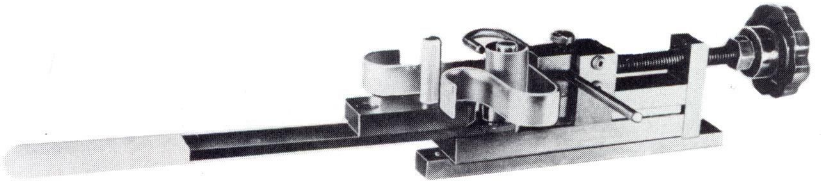
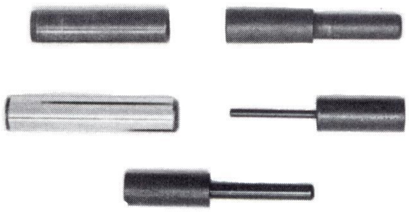
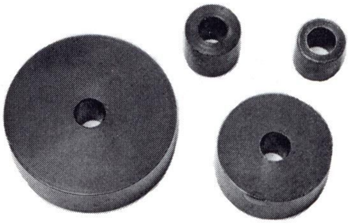
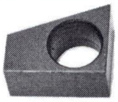
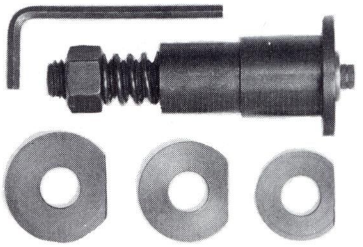
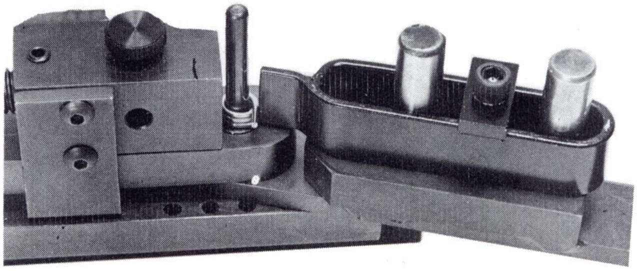
Remove the 1/2″ diameter pin and slip out the handle. Insert the **FORM-MATIC** handle . . . align the center hole with the hole in the handle visually and replace the 1/2″ pin.

As in normal bending, clamp the material behind the form tool. Pushing the handle back in a counter clockwise direction, insert the follower pin into the handle behind the material. (A)
Pull the handle in a clockwise direction. (B)
The follower pin automatically moves back and forth following the contour of the die. (C)
To remove the pin, continue moving the handle until the material springs away or the follower retracts from the die. (D)

For metal bending instructions refer to the Karl A. Neise brochure
"INTRICATE METAL BENDING MADE EASY . . . AND ECONOMICAL"

KAN BEND

*** TOOLS FURNISHED WITH BENDER**

			DESCRIPTION	PRICE
				84.00
GAUGE AND PIN		*	Bend Locating Gauge and Pin	1.50
CIRCLE PINS			1/8″ Dia. Pin	2.00
		*	3/16″ Dia. Pin	2.00
		*	1/4″ Dia. Pin	2.00
			3/8″ Dia. Pin	2.00
		*	1/2″ Dia. Pin	2.00
CIRCLE DIES			7/8″ Dia. Circle	4.00
		*	1″ Dia. Circle	4.00
			2″ Dia. Circle	4.00
			3″ Dia. Circle	6.00
SHARP & SQUARE BEND DIE		*	Sharp Angle Die	3.00
CIRCLE LOOPS (FOR HAND FORMING)			4″ Dia. Circle	6.00
			5″ Dia. Circle	6.00
			6″ Dia. Circle	9.00
			7″ Dia. Circle	9.00
			8″ Dia. Circle	9.00
			Circle Set (2″ - 8″ Dia.)	45.00
EDGE BENDER KIT			Edge Bender Kit	24.00
CLOSE FOLLOWER (ATTACHMENT)			Close Follower Attachment	9.00
			Model 51200 or Model 51204	See Catalog

KARL A. NEISE, INC.

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Tel.: (212) 446-7799 - Cable Address: KARLNEISE

NEISE MODERN TOOLS

Prices subject to change without notice

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